

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

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U.S. PATENT AND TRADEMARK OFFICE  
BOARD OF PATENT APPEALS  
AND INTERFERENCES

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Ex parte MICHAEL A. FILIPIAK, RICHARD RIAL HAMANN and TIMOTHY JOHN KEY

Appeal No. 2005-1645  
Application No. 10/037,852

ON BRIEF

Before FRANKFORT, MCQUADE and BAHR, Administrative Patent Judges.  
BAHR, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1-30, which are all of the claims pending in this application.

BACKGROUND

The appellants' invention relates to a ball and socket joint for use on a robotic arm and a robotic arm using such ball and socket joint. A copy of the claims under appeal is set forth in the appendix to the appellants' brief.

The examiner relied upon the following prior art references of record in rejecting the appealed claims:

Herbermann	5,383,738	Jan. 24, 1995
Chen	5,973,248	Oct. 26, 1999

The following rejections are before us for review.

Claims 1, 2 and 23-25 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Chen.

Claim 3 stands rejected under 35 U.S.C. § 103 as being unpatentable over Chen.

Claims 4-12 and 26 stand rejected under 35 U.S.C. § 103 as being unpatentable over Chen in view of Herbermann.

Claim 22 stands rejected under 35 U.S.C. § 102 as being anticipated by Herbermann.

Claims 13-21 and 27-30 stand rejected under 35 U.S.C. § 103 as being unpatentable over Herbermann in view of Chen.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the final rejection (mailed July 31, 2003) and answer (mailed August 10, 2004) for the examiner's complete reasoning in support of the rejections and to the brief (filed May 28, 2004) and reply brief (filed October 12, 2004) for the appellants' arguments thereagainst.

### OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. As a consequence of our review, we make the determinations which follow.

We shall not sustain the examiner's rejections of claims 1, 2 and 23-25 as being anticipated by Chen, claim 3 as being unpatentable over Chen, claims 4-12 and 26 as being unpatentable over Chen in view of Herbermann, claim 22 as being anticipated by Herbermann and claims 13-21 and 27-30 as being unpatentable over Herbermann in view of Chen. For the reasons expressed below in the new ground of rejection, these claims are indefinite. Therefore, the prior art rejections must fall because they are necessarily based on speculative assumption as to the meaning of the claims. See In re Steele, 305 F.2d 859, 862-63, 134 USPQ 292, 295 (CCPA 1962). It should be understood, however, that our decision in this regard is based solely on the indefiniteness of the claimed subject matter, and does not reflect on the adequacy of the prior art evidence applied in support of the rejections.

### NEW GROUND OF REJECTION

Pursuant to 37 CFR § 41.50(b), we enter the following new rejection.

Claims 1-30 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the invention.

Each of the appellants' claims 1-30 recites "a pair of opposed inclined edges." The term "edge" has several well established definitions or usages, including "the line where an object or area begins or ends" or "the narrow part adjacent to a border" or "a line or line segment that is the intersection of two plane faces (as of a pyramid) or of two planes" (see, for example, Merriam-Webster OnLine as appended to appellants' response filed September 30, 2003).

With respect to claim terminology, our reviewing court has set forth the following principles. The words of a claim are generally given their ordinary and customary meaning; moreover, the ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application. Phillips v. AWH Corp., 415 F.3d 1303, \_\_\_\_, 75 USPQ2d 1321, 1326 (Fed. Cir. 2005). The person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification. Id. In addition to the specification, the prosecution history of a patent application should be considered in interpreting claim terminology. Id. at 1329.

With these principles in mind, we have reviewed the claims themselves, the appellants' specification and drawings, and the prosecution history of the application to determine what the term "edges" means in the context of the appellants' claims. While the context of the term "edges" in claims 13 and 22 appears equally consistent with any

of the three established usages discussed above, the recitation in claim 1 that each edge “defines an opening for each of said pair of sockets” would appear to lend itself more precisely to the definition “the line where an object or area begins or ends” than to the definition “the narrow part adjacent to a border” but does not definitively exclude any of the established definitions.

Turning next to the specification and drawings, page 3 of the present specification refers to “edges 34” which are inclined from the lower surface 36 of the clamp 22. The reference numeral 34 in Figure 2, and the reference numeral 134 in Figures 3-5, which one of ordinary skill in the art would understand to denote the “edge” in the embodiment of Figures 3-5, appears to point to the end face of the clamp 22, 122 and, in any event, certainly does not point to the line defining the opening of each socket. No other structural feature of the appellants’ clamp is identified as an “edge” in the appellants’ specification. As such, the disclosure in the appellants’ specification and drawings weighs in favor of a definition such as “the narrow part adjacent to a border” (i.e., a narrow end face) rather than a definition requiring a line.

On the other hand, the appellants’ remarks on page 2 of the response filed September 30, 2003 indicate a desire that the term “edge” be interpreted as “the line where an object or area begins or ends.” This interpretation, as mentioned above, conforms well to the context in which the term “edges” appears in claim 1 but lacks antecedent basis in the specification.

For the foregoing reasons, it is not clear whether the term “edges” in claims 1, 13 and 22 requires a line (i.e., the line defining the periphery of the socket opening) or a narrow end face (i.e., the narrow end face of the clamp). Accordingly, the metes and bounds of the claims cannot be determined with any certainty.<sup>1</sup>

Moreover, the use of the term “inclined” in independent claims 1, 13 and 22 without recitation of a reference relative to which the edges are inclined further renders the scope of the claims indefinite. It is true that breadth alone does not render a claim indefinite. See In re Johnson, 558 F.2d 1008, 1016 n.17, 194 USPQ 187, 194 n.17 (CCPA 1977); In re Miller, 441 F.2d 689, 693, 169 USPQ 597, 600 (CCPA 1971); In re Gardner, 427 F.2d 786, 788, 166 USPQ 138, 140 (CCPA 1970) and Ex parte Scherberich, 201 USPQ 397, 398 (Bd. App. 1977). It is also true, however, that all words in a claim must be considered in judging the patentability of that claim against the prior art (In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)). Thus, the term “inclined” cannot simply be ignored or read out of the claim. The appellants’ specification discusses, on page 3, an inclination angle of each edge 34 “from the lower surface 36 of the clamp 22.” Independent claims 1, 13 and 22, however, do not specify that the edges are inclined relative to the lower surface of the assembly and it is well established that limitations are not to be read into the claims from the specification. In re Van Geuns, 988 F.2d 1181, 1184, 26 USPQ2d 1057, 1059 (Fed. Cir. 1993) citing In

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<sup>1</sup> In this regard, we note that the examiner’s laundry list (answer, pages 3-4) of structural items which purportedly constitute “opposed inclined edges” is not at all illuminating as to how the examiner in fact interpreted “edges” in reading the appellants’ claims on the prior art.

re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989). The appellants argue, on page 5 of the brief and on page 2 of the response filed September 30, 2003, that “inclined” is defined as “deviating from the vertical or horizontal” but the underlying disclosure provides no support for such an interpretation. Moreover, such an interpretation of “inclined” is contraindicated by the terminology of dependent claims 11 and 20 which recite that the inclined edges are inclined approximately 75 degrees from a lower edge<sup>2</sup> of the assembly.

The second paragraph of 35 U.S.C. § 112 requires claims to set out and circumscribe a particular area with a reasonable degree of precision and particularity. Johnson, 558 F.2d at 1015, 194 USPQ at 193. For all of the foregoing reasons, the scope of the appellants’ claims cannot be determined with the requisite degree of precision and particularity.

#### CONCLUSION

To summarize, the decision of the examiner to reject claims 1-30 is reversed and a new ground of rejection of claims 1-30 under 35 U.S.C. § 112, second paragraph, is entered pursuant to 37 CFR § 41.50(b).

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<sup>2</sup> The terminology “lower edge” lacks clear antecedent basis in the specification, but the context in which this terminology is used in claims 11 and 20 is strongly indicative of correspondence with the lower surface 36 referred to in the second paragraph on page 3 of the appellants’ specification. In this context, therefore, the term “edge” appears to be used in the sense of a surface rather than a line.

This decision contains a new ground of rejection pursuant to 37 CFR § 41.50(b) (effective September 13, 2004, 69 Fed. Reg. 49960 (August 12, 2004), 1286 Off. Gaz. Pat. Office 21 (September 7, 2004)). 37 CFR § 41.50(b) provides "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review."

37 CFR § 41.50(b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

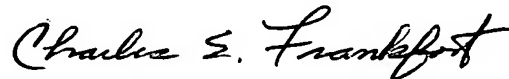
(1) *Reopen prosecution*. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . .

(2) *Request rehearing*. Request that the proceeding be reheard under § 41.52 by the Board upon the same record. . . .



No time period for taking any subsequent action in connection with this appeal  
may be extended under 37 CFR § 1.136(a).

REVERSED; 37 CFR § 41.50(b)



CHARLES E. FRANKFORT  
Administrative Patent Judge



JOHN P. MCQUADE  
Administrative Patent Judge



JENNIFER D. BAHR  
Administrative Patent Judge

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